

## Electronic programmer

RWB29Si



To control domestic central heating systems, hot water systems, or two central heating zones.

- Unique menu-driven programming
- Easy-to-read, large backlit display
- Universal programming: daily, weekday/weekend, 7-day
- Holiday programming
- 2/3 ON/OFFs
- Up to three-hour boost facility
- Clock with auto summer/winter changeover
- Selectable time formats: 12-hour and 24-hour
- Gravity or fully pumped systems
- Industry-standard backplate
- Battery back-up
- Service interval reminder

## Use

The RWB29Si electronic programmer is designed to provide individual control of domestic central heating systems, hot water systems or two central heating zones. Together with the appropriate thermostats (room/cylinder) and motorised valve(s), it can be used in most types of domestic heating installations to provide time/temperature control.

## Functions

### Service interval reminder function

The boiler service interval reminder function complies with Regulation 36 of the Gas Safety (Installation and Use) Regulations 1998, requiring landlords to carry out a safety check at intervals of no more than 12 months.

- If the function is enabled, a message is displayed on screen, informing you about the number of days remaining until the next boiler service is due, up to 50 days prior to the actual service date (the prewarning period is set by the engineer, default is 50 days).
- If the message "SERVICE DUE SYSTEM OFF" is displayed, it means that the system is turned OFF. For your safety, you should contact an engineer to service the boiler as quickly as possible.

**Note:** The boiler can still be used to obtain basic services for a limited time by pressing the + hrs button.

## Mechanical design

The unit consists of the following parts:

- Plastic housing with electronics (inputs, outputs), operating elements (HMI) and DIP switches
- An industry standard backplate with screws

### Operation and settings



## Type summary

Product number	Stock number	Description
RWB29Si	BPZ:RWB29Si	Electronic programmer

### Delivery

When ordering, indicate the product number, stock number and description.

## Equipment combinations

Description	Product number	Data sheet*)
Room thermostat	RAA21..	CE1N3562
Cylinder thermostat	RAM...	RES107
Three-way valve	CMV...	A6V10424346
Zone valve	CZV...	A6V10424346

\*) The documents can be downloaded from <http://siemens.com/bt/download>.

## Product documentation


Topic	Title	Document ID
Installation and commissioning	RWB29Si Installation instructions	A6V10464892
Operating instruction	RWB29Si operating instructions	A6V10464891
Standards and directives	CE declarations	8000078265
Environmental compatibility	Environmental declarations	A6V101118378

Related documents such as environmental declarations, CE declarations, etc., can be downloaded at the following Internet address:


<http://siemens.com/bt/download>

## Notes


### Security

	<b>⚠ CAUTION</b>
	<b>National safety regulations</b> Failure to comply with national safety regulations may result in personal injury and property damage <ul style="list-style-type: none"><li>• Observe national provisions and comply with the appropriate safety regulations.</li></ul>

### Mounting

	<b>NOTICE</b>
	<ul style="list-style-type: none"><li>• Do not install the unit where either extremes of heat or cold exist.</li><li>• Steam, water or oil cannot splash onto or enter the unit or its backplate.</li></ul>

### Installation

	<b>NOTICE</b>
	<ul style="list-style-type: none"><li>• All external wiring must comply with current IEE regulations.</li><li>• Only competent electricians may wire this unit.</li><li>• Do not use this unit to control immersion heaters.</li><li>• Comply with local regulations to wire, protect and earth the unit.</li></ul>



### ⚠ WARNING

#### No internal line protection for supply lines to external consumers

Risk of fire and injury due to short circuits!

- Adapt the line diameters as per local regulations to the rated value of the installed over-current protection device.
- The AC 230 V mains supply must have an external circuit breaker with a rated current of no more than 3 A.

## Commissioning

### Programming mode

The RWB has 3 programming modes:

- Daily: The unit will switch ON and OFF at the same times each day.
- Weekday/Weekend: The schedule can be changed for weekdays and weekends.
- 7-Day: The unit can be set to switch ON and OFF differently every day or any day.

#### Note:

The RWB is factory-set to provide two ON/OFF switching periods per day, and each day is the same, i.e. daily operation. To select other types of switching, set the DIP switches to the relevant position for the type of operation required (see **DIP switches** below for more information), and then press **RESET**.

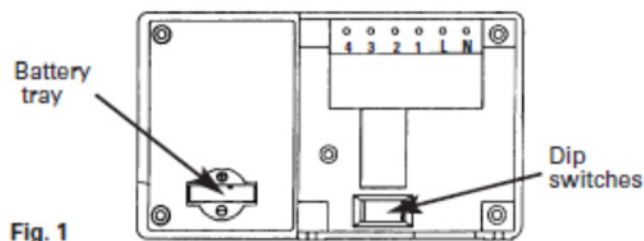


### NOTICE






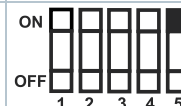

Press **RESET** after any DIP switch change.

### DIP switches

The DIP switches are located at the rear bottom of the unit (see Fig. 1).



To change the DIP switch positions, switch off the mains supply, then remove the unit from its backplate by simply loosening the two screws and pulling them towards you.

Programme choice with DIP# 1, 2, 3		ON/OFF switching periods with DIP# 4		System type with DIP# 5	
 ON OFF 1 2 3 4 5	Daily	 ON OFF 1 2 3 4 5	Two ON/OFF periods per day	 ON OFF 1 2 3 4 5	Gravity system (10)
 ON OFF 1 2 3 4 5	Weekday/Weekend	 ON OFF 1 2 3 4 5	Three ON/OFF periods per day	 ON OFF 1 2 3 4 5	Fully-pumped system (16)
 ON OFF 1 2 3 4 5	7-Day				

After the DIP switch changes, put the unit back onto its backplate. Then see the leaflet supplied with the unit on the programme you selected: daily programming, weekday/weekend programming and 7-day programming.

#### Application: HW&CH or CH1&CH2

RWB29Si can be used to independently operate two Central Heating zones (CH1&CH2), or a single Heating Zone and a Hot Water Circuit (HW&CH). When the unit is powered on for the first time, the commissioning engineer is given the option to select "HW&CH" or "CH1&CH2".

The unit is factory set to "HW&CH". If the application changes, this can be changed by pressing the RESET button on the front of the unit, and reset to the desired option. For the application of "CH1&CH2", apply the enclosed sticker over the button area on the front of the unit to label the buttons and indicator lights accordingly.

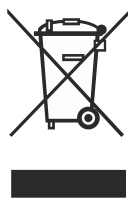
#### Time format

RWB29Si can display the time in 24- or 12-hour format, with 24 hours as factory setting. To change the format, press the RESET button on the front of the unit, and set to the desired option.

### Maintenance

The unit is designed for maintenance-free operation.

### Disposal



The device is considered an electronics device for disposal in terms of European Directive 2012/19/EU and may not be disposed of as domestic garbage.

- Dispose of the device through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

### Warranty

Technical data on specific applications are valid only together with Siemens products listed under "Equipment combinations". Siemens rejects any and all warranties in the event that third-party products are used.

## Technical data

Power supply		
Operating voltage	AC 230 V	
Switching voltage	AC 230 V	
Frequency	50 Hz	
Power consumption	50 mA	
Backup battery	Type	CR2032 lithium battery
	Life	Min. 3 years



Max. external supply line fusing: 3 A

Outputs	
Contact rating	- Resistive: max. 6 A - Inductive: max. 2 A

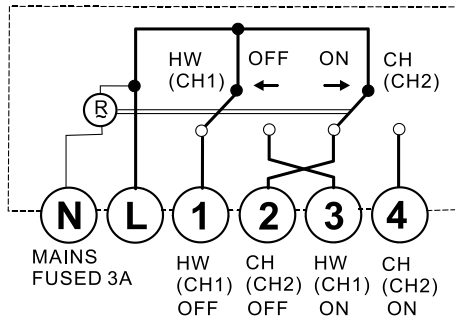
Environmental conditions	
Moisture and dust ingress	IP20
Operating humidity	20...80% r.h., 90% r.h. non-condensing
Operating ambient temperature	0...40 °C
Storage ambient temperature	-20...54.5 °C

Standards, directives and approvals	
EU conformity (CE)	8000078265 <sup>*)</sup>
Safety class	as EN60730-2-7 standard
Housing	as IEC 730 standard
Environmental compatibility	The product environmental declaration (A6V101118378 ) contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal).

<sup>\*)</sup> The documents can be downloaded from <http://siemens.com/bt/download>.

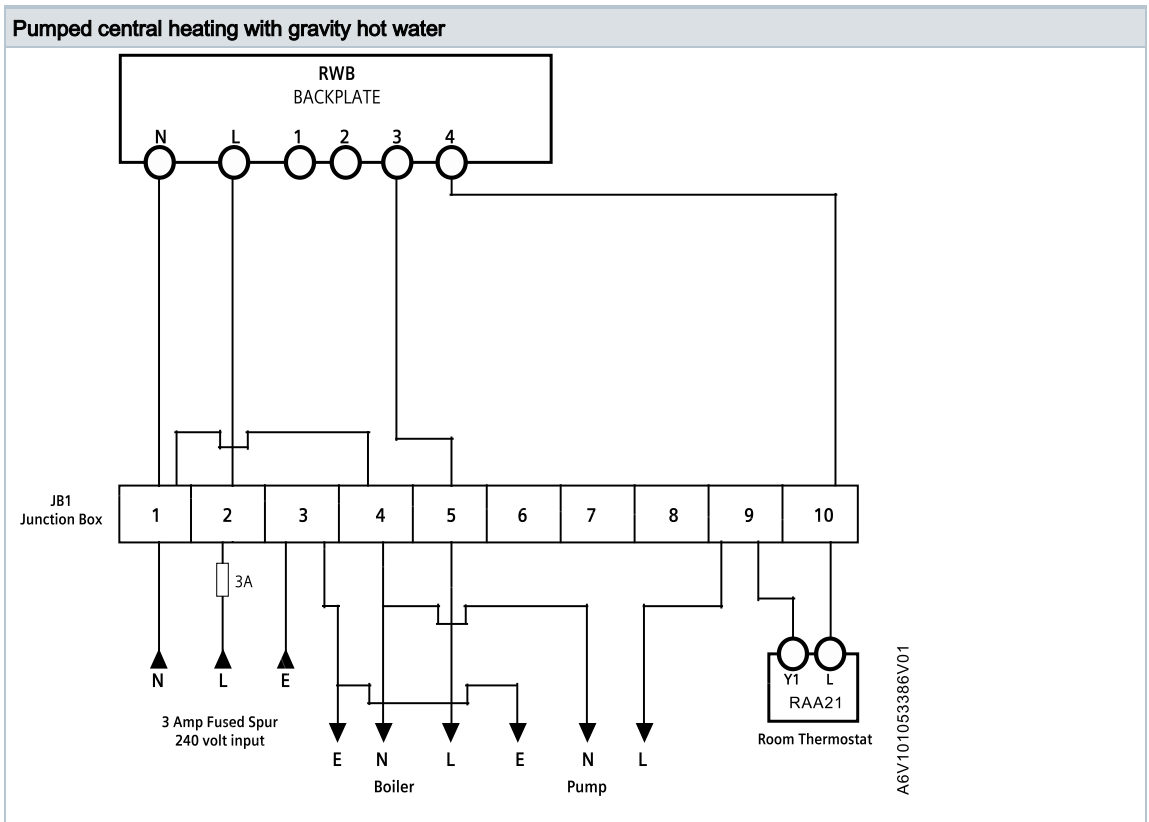
General	
Connection terminals	2.0 mm dia.
Housing	Fire retardant, ABS material
Weight without/with packaging	253 g/345 g

Internal diagram

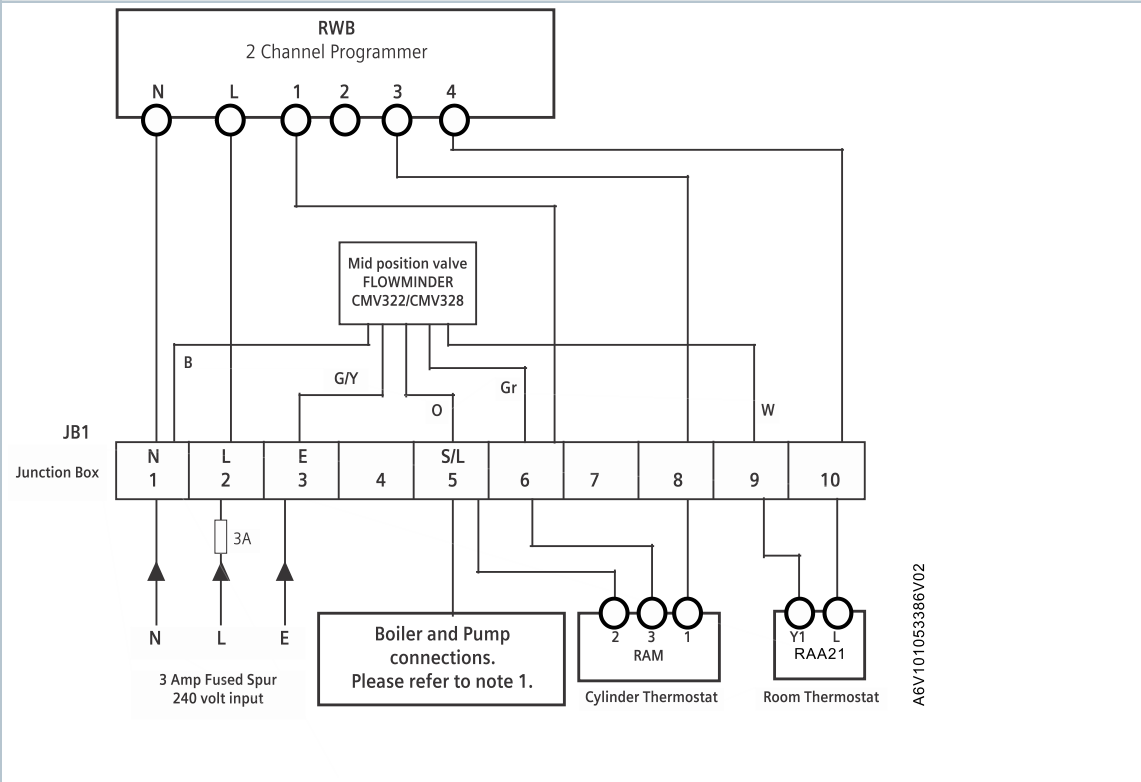


- L Live, AC 230 V
- N Neutral, AC 230 V
- 1 Hot water (HW) or central heating 1 (CH1), normally closed output
- 2 Central heating (CH) or central heating 2 (CH2), normally closed output
- 3 Hot water (HW) or central heating 1 (CH1), normally open output
- 4 Central heating (CH) or central heating 2 (CH2), normally open output

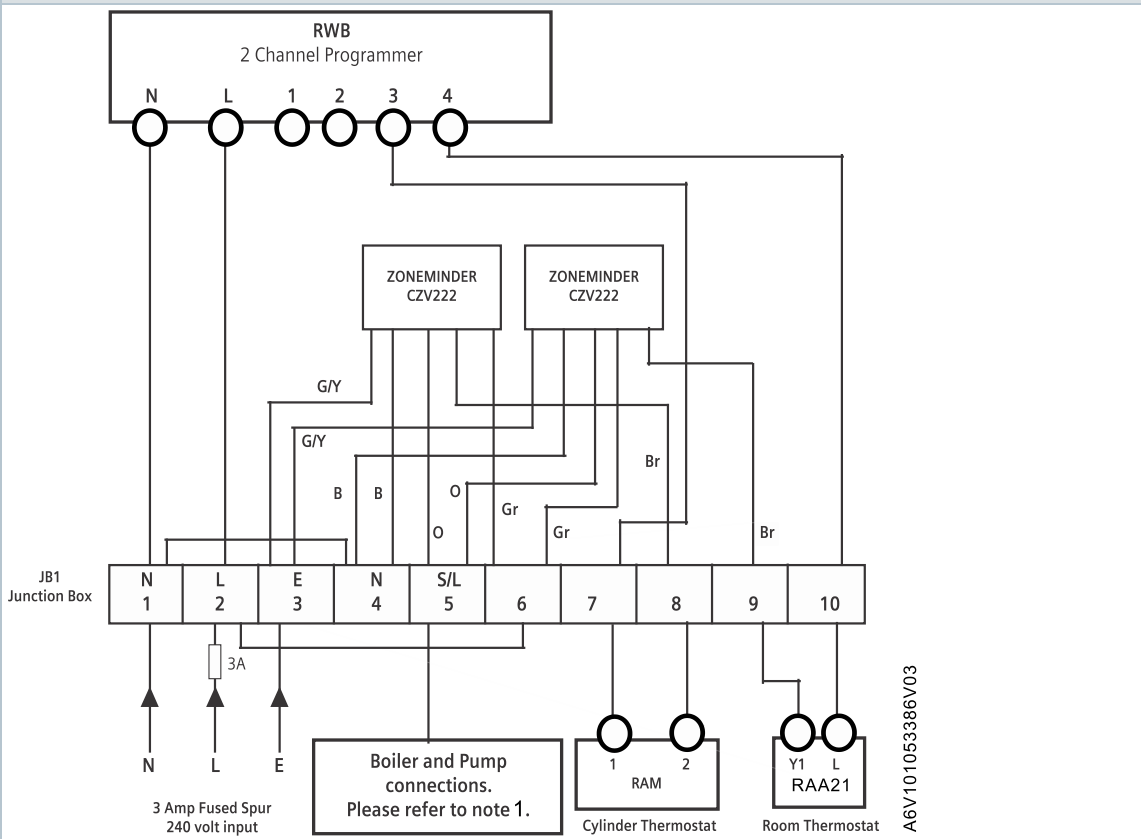
Wiring diagrams



**Mid-position system**

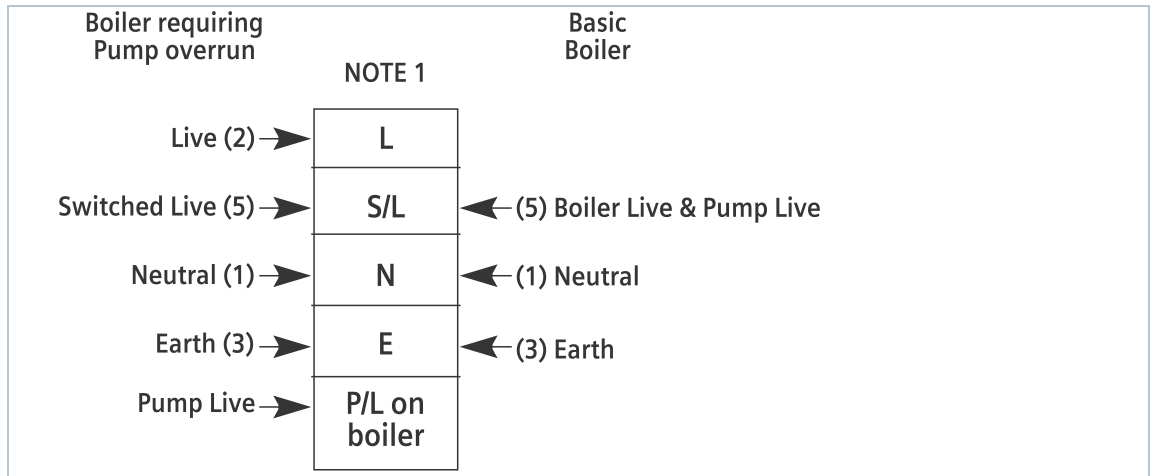


**Zone valve system**





**Note 1:**



RWB terminal configuration	Flowminder colour codes	Zoneminder colour codes
1. Off – Hot water	G/Y = Green/Yellow	G/Y = Green/Yellow
2. Off – Central heating	B = Blue	B = Blue
3. On – Hot water	O = Orange	O = Orange
4. On – Central heating	Gr = Grey W = White	Gr = Grey Br = Brown

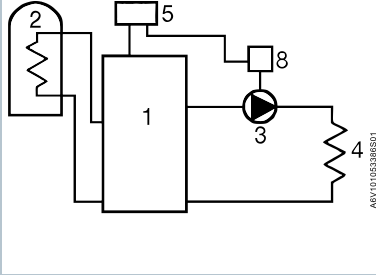
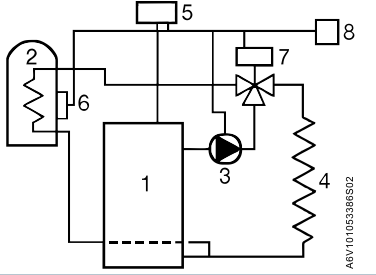
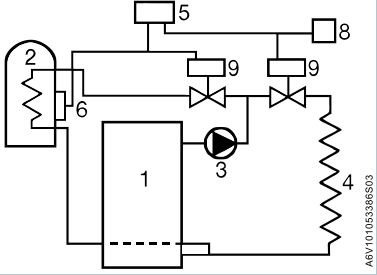


**⚠ WARNING**

**The mains supply must be isolated before replacing an existing programmer.**

Failure to do so may cause damage to the RWB29Si, and will invalidate any warranty claims.

## Application examples

Pumped central heating with gravity hot water (10 programmes)	Mid-position system (16 programmes)	Zone valve system (16 programmes)
		
1. Boiler	4. Heating circuit	7. Three-way valve CMV...
2. Hot water cylinder	5. Programmer RWB	8. Room thermostat RAA...
3. Pump	6. Cylinder thermostat RAM...	9. Zone valve CZV...

## Dimensions

Dimensions in mm

